Remarks

Applicants acknowledge that claims 20-21, 23-39 and 42 are pending in the present application.

Examiner Interview

Applicants thank the Examiner and Mr. Hyung Sough for their courtesy extended during a telephonic interview on September 9, 2005, with the undersigned regarding the present application and the Advisory Action mailed September 1, 2005, which refused to enter the amendments filed on August 5, 2005.

Although no agreement was reached during the interview, the Examiner pointed to page 6, lines 18-22 of the originally filed specification for what he felt was interesting and novel about the subject method of the present application. The undersigned explained to the Examiner that the part the Examiner pointed out was reflected in the limitation added to claim 20, which was in the cancelled claim 22.

35 U.S.C. § 112 (Written Description)

The final Office Action dated June 7, 2005, rejects claims 20-39 and 42 under 35 U.S.C. § 112, ¶ 1, as failing to comply with the written description requirement. Applicants have been asked to show that the subject matter of claims 20 in this case is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. *See Manual of Patent Examining Procedure* (*MPEP*), § 2163.02, page 2100-177 (8th ed., Rev. 2, 2004).

The final Office Action first finds that the claim limitation "...where at least one steps of calculating, ranking and selecting is carried out by a computer" in claim 20 is not supported by the original specification. In the Examiner's view, "the specification is silent if the steps are done by computer." Applicants respectfully remind the Examiner that the written description of the invention includes both the specification and claims as originally filed. For example, the originally filed claim 11 reads, "A computer programmed to carry out the steps of claim 1." And claims 1, as originally filed, includes steps of calculating, ranking, and selecting. Therefore, claim 11 of the originally filed application clearly teaches that at least one of the steps of calculating, ranking, and selecting could be carried out by a computer. Therefore, the written

description of the present invention, which includes the specification and claims as originally filed, shows that the inventors, at the time the application was filed, had possession of the invention of claim 20.

Next, the final Office Action holds that the originally filed specification does not support claim 20 because "the disclosed invention selects securities by average rank of ranks calculated based on 4 criteria." Applicants respectfully submit that the method described on page 6, line 22 to page 7, line 9 that uses four criteria—one year price appreciation value, six-month price appreciation value, return-on-assets ratio, and price-to-cashflow ratio—to rank securities, and then selects securities based on an average of the four individual ranks calculated based on the four criteria is just one example given by the inventors for the present invention. *See*, page 6 line 18 ("For example, ..."). It is not necessary to use four criteria, because the specification makes it clear that three or more than four criteria can be used to rank securities. For example, claim 1 of the application as originally filed only recites three criteria.

The specification also generally provides that "the stocks are sorted, or organized, according to the magnitude of the company's average rank" (page 6, lines 17-18), which means that the average rank does not have to be calculated by averaging the three or more individual ranks. In order to expedite the examination of the present application, however, Applicants have amended claim 20 to recite that the average rank comprises "the average of the one or more separate price appreciation ranks, separate return on assets ratio rank and separate price to cashflow ratio rank for said security." Therefore, the Examiner's rejection in Paragraph 2(b) of the final Office Action has become moot.

35 U.S.C. § 103 (Non-obviousness)

To put the claims in better form for consideration, claim 20 and 42 have been amended to incorporate the additional limitation of claim 22; claim 22 has been cancelled, and claim 23 has been amended to depend from claim 20.

Claims 20, 21, 23-39 and 42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over O'Shaughnessy (U.S. Patent No. 6,317,726) in view of "India: Financial ratios... 1999" (Businessline). Applicants respectfully traverse the rejection and submit that claims 20, 21, 23-39 and 42 are patentable for the reasons provided below.

In order for a 35 U.S.C. §103 rejection to be proper, a *prima facie* case of obviousness must be established. *In re Ochiai,* 71 F.3d 1565, 37 U.S.P.Q.2d 1127 (Fed. Cir. 1995). The *MPEP* states:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

MPEP, § 2142, at 2100-128 (emphases added).

In response to Applicants' argument that there is no suggestion to combine and modify the references, the final Office Action states that "profitability is the motivation." Applicants admit that profitability is the most important consideration for all investment strategies. However, "profitability" is a too general motivation to lead one of ordinary skill in the art to go through all the steps of modification and combination required to reach the method of the present invention.

In fact, in this case, rather than motivating a person of ordinary skill in the art to modify O'Shaughnessy in the manner as suggested by the Examiner, profitability will in fact deter a person to do so because of the "teaching away" in O'Shaughnessy. Although O'Shaughnessy teaches that "using several factors allows one to enhance performance or reduce risk," it continues to warn,

> However, just cumulating additional factors does not increase the performance: if to one took Large Stocks with PE ratios below 20 and positive earnings gains for the year and bought the 50 with the best 1-year price performance, one would actually earn less than if one bought the low PE, high relative strength stocks alone. The addition of positive earnings gains hurt performance in this instance. More factors do not necessarily mean better performance.

Col. 9, line 66 to col. 10, line 6 (emphases added). Based on O'Shaughnessy's teaching, one of ordinary skill in the art would be led away from modifying the methods taught in O'Shaughnessy, and would be motivated not to combine price appreciation, price to cashflow ratio, and/or return on assets ratio in the manner suggested by the Examiner against the

teaching of O'Shaughnessy, because one would be motivated to closely follow the combinations of value factors and methods taught by O'Shaughnessy to avoid hurting performance and to achieve better profitability.

As it will be further discussed below, O'Shaughnessy does not teach or suggest to sort stocks according to price to cashflow ratio, and does not teach to combine price to cashflow ratio with price appreciation in selecting securities, much less to combine sorting according to price to cashflow ratio and sorting according to price to cashflow ratio to form a group of sorted securities. Neither O'Shaughnessy nor Businessline teaches to sort securities according to return on assets ratio. In order to get the invention claimed in claim 20 or 42, one would need to (1) modify O'Shaughnessy to sort stocks according to price to cashflow ratio; (2) modify Businessline to sort stocks according to return on assets ratio; (3) combine the teaching of Businessline with the teaching of O'Shaughnessy; and (4) combine sorting according to price to cashflow ratio, sorting according to price appreciation, and sorting according to return on assets ration together in the claimed manner to form a group of sorted stocks. Applicants respectfully submit that there is no sufficient motivation or suggestion in the prior art for one of ordinary skill in the art to make any of these modifications, let alone the entire complex combination. *See, e.g., Yamouchi Pharm. Co. v. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 56 USPQ2d 1641 (Fed. Cir. 2000).

Businessline teaches the concept of "return on assets," but does not teach or suggest to sort securities according to return on assets ratio and assign each stock a separate return on assets ratio rank. Neither does it teach or suggest to combine a stock's return on assets ratio rank with one or more other separate ranks assigned to the stock by sorting stocks according to one or more other factor to form a group of ranked stocks. Aside from impermissible hindsight use of Applicants' specification, there is no suggestion in either O'Shaughnessy or Businessline to a person of ordinary skill that the specific claimed factors should be combined in the manner claimed. Out of the hundreds of factors that conceivably could be used to select securities, Applicants have found that the combination of price appreciation, return on assets ratio and price to cashflow ratio in the manner as claimed by the present application achieves useful results. Nothing in the references of record teaches or suggests this novel combination.

Compared to the methods and strategies disclosed and claimed in O'Shaughnessy, the method of the present application enjoys a distinctive beauty of simplicity.[1] In order to rank available securities, both independent claims 20 and 42 of the present application require (1) "ranking according to price appreciation to assign each of said available securities one or more separate price appreciation ranks," (2) "ranking according to said return on assets ratio to assign each of said available securities a separate return on assets ratio rank," (3) "ranking according to said price to cashflow ratio to assign each of said available securities a separate price to cashflow rank," and (4) "determining for each of said available securities an average rank comprising the average of the one or more separate price appreciation ranks, separate return on assets ratio rank and separate price to cashflow ratio rank for said security."

Nothing in O'Shaughnessy or Businessline teaches or suggests such a ranking method, which is totally novel and nonobvious. The prior art of record in fact does not teach or suggest to get an average rank of a security by averaging any two or more separate ranks of the same security according to two or more different value factors. The Examiner cites four sections of O'Shaughnessy (abstract; C2 L9-L24; C3 Table 1; C13 L46-L47) to support its rejection, but none of them (or any other place in O'Shaughnessy or Businessline) teaches or suggests to average any two or more separate ranks assigned to a stock according to different selection factors in the manner claimed by the present invention, much less an average of the separate ranks assigned to the stock according to the three specific factors described in the claim.

Moreover, although O'Shaughnessy teaches the concept of "price to cashflow" ratio and Businessline teaches the concept of "return on assets," the prior art of record does not teach or suggest to rank a group of securities according to their price to cashflow ratios or their return on assets ratios, much less to select securities based on a combination of these rankings.

O'Shaughnessy teaches, among a number of value factors, that price to cashflow ratio is a measure of whether a stock is cheap or not, and that stocks with low price to book, price

[1] Under U.S. law, simplicity is not a proper factor for obviousness analysis, *see In re Chu*, 66 F.3d 292, 298, 36 USPQ2d 1089, 1094 (Fed. Cir. 1995); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984), but a hallmark of invention. *See Diamond Rubber v.*

to cashflow, and price-to-sales ratios outperform other stocks. However, O'Shaughnessy does not teach to use price to cashflow ratio to rank a group of stocks and assign each stock a separate rank. Neither does O'Shaughnessy teach or suggest that the actual ranks assigned to the stocks according to their price to cashflow ratios will be useful in selecting securities to form an investment portofolio. In all the methods, models, or strategies taught and/or claimed in O'Shaughnessy, cashflow (or any value related to it) is merely used to identify stocks having cashflow (or cashflows per share) greater than a database mean. *See* O'Shaughnessy, col. 11, line 31; col. 13, line 46; col. 14, line 9; col. 15, line 27; col. 18, lines 38-39 and 56-57; col. 19, lines 11-12; co. 20, lines 42 and 59-60; col. 22, lines 41-42; col. 23, lines 33-34; col. 31, lines 5-6; col. 33, lines 5-6, 24-25, and 50-51; col. 34, lines 3-4, 23-24, and 39-40; col. 35, lines 66-67; col. 36, lines 17-18, 38-39, and 56-57; col. 37, lines 5-6. By identifying stocks having cashflow (or cashflows per share) greater than a database mean, O'Shaughnessy teaches to identify stocks having the lowest price to cashflow ratios. However, O'Shaughnessy does not teach or suggest to rank a group of available stocks according to their price to cashflow ratios, and then use the ranking, either alone or in combination with other separate rankings, to select stocks.

O'Shaughnessy actually teaches to sort (i.e., rank) stocks according to price appreciation, dividend yield, or price-to-sales ratio into a sorted list, but it does not teach or suggest to sort stocks according to price to cashflow ratio even though O'Shaughnessy discloses the concept of "price to cashflow" ratio. Applicants respectfully submit that this fact reflects that the inventor of O'Shaughnessy did not contemplate that the ranking of stocks according to price to cashflow ratio would be useful and should be included in his invention.

The final Office Action admits that O'Shaughnessy does not teach a return on assets ratio, and refers to Businessline for the needed teaching. However, although Businessline teaches the concept of "return on assets" and teaches that return on assets is a good measure of how profitably a company is using the funds it has raised, it does not teach or suggest to rank securities according to their return on assets ratios and to use this ranking, either alone or in combination with other separated rankings, to select securities. Businessline does not teach or suggest to rank securities according to price to cashflow ratio as well.

Consolidated Rubber Tire, 220 U.S. 428, 434-35, 31 S.Ct. 444, 447 (1911); *Demaco v.*

Moreover, although O'Shaughnessy teaches to sort a first set, a second set, and a third set of securities according to price appreciation, dividend yield, and price-to-sales ratio in a seriatim manner, it does not teach to sort the same set of securities using any three (or even two) value factors to assign each security in the set of securities three (or even two) separate ranks and then combine the three (or even two) separate ranks to form a group of ranked securities, much less to average the three (or even two) separate ranks to form a group of ranked securities.

Therefore, O'Shaughnessy and Businessline, even when combined together, do not teach or suggest all the claim limitations of claims 20 and 42. For this reason alone, the final Office Action has failed to establish a *prima facie* case of obviousness.

For all the reasons stated above, Applicants respectfully submit that independent claims 20 and 42 are not obvious over the prior art of record and are allowable.

Claims 21, 23-39 are dependent on claim 20 and are allowable for the same reasons as claim 20. In addition, these claims are limited to additional features not taught or suggested by the references of record.

For example, clam 24 is limited to a method of selecting stocks wherein the available securities are only ranked according to the three factors—price appreciation, return on assets ratio and price to cashflow ratio. Neither O'Shaughnessy nor Businessline teachs or suggests predetermined factors consisting only of these three factors, so claim 24 is allowable at least for this extra reason.

In conclusion, the prior art of record does not make out a *prima facie* case of obviousness, and claims 20, 21, 23-39 and 42 are in condition for allowance.

Langosdroff Licensing, 851 F.2d 1387, 1391, 7 USPQ2d 1222, 1225 (Fed. Cir. 1988).

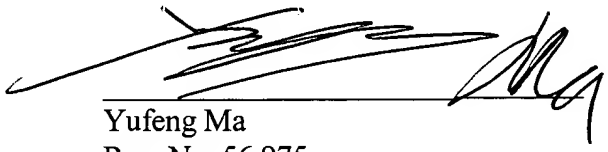
Conclusion

In view of the above amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of 20, 21, 23-39 and 42, and all claims declared patentable. A Notice of Allowance is therefore respectfully solicited.

The Commissioner is authorized to charge any required fees including those for the RCE and the one-month extension of time to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Date: October 7, 2005

Respectfully submitted,



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